



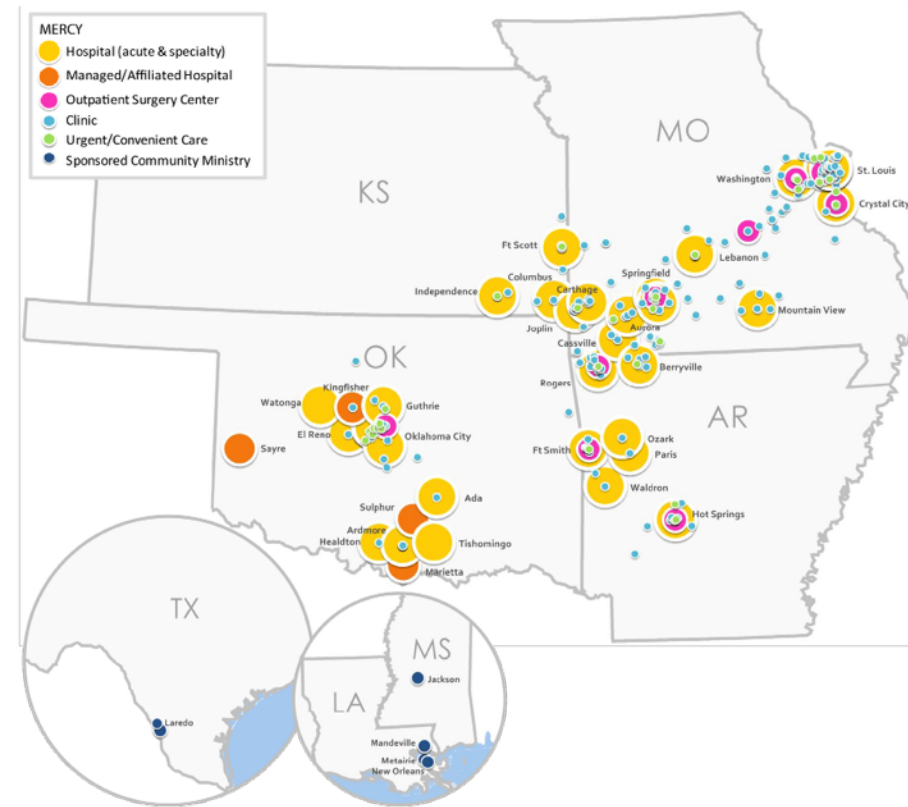
SMW & Healthcare

Chris Koerner & Nancy Krautmann

SMWCon Spring 2014
Montreal, Canada



Introduction



Introduction

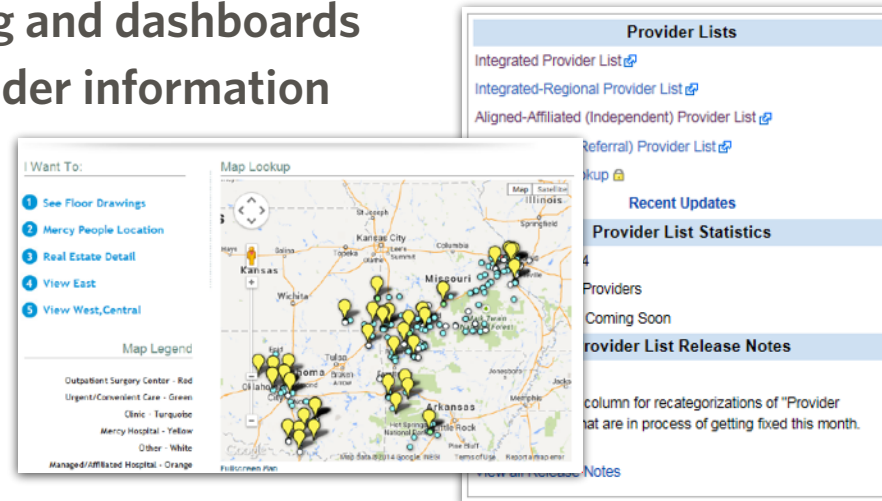
Chris & Nancy from Mercy – about 3 yrs and 1 yr here

Talk a little about Mercy -

Mercy is the sixth largest Catholic health care system in the U.S. and serves more than 3 million people annually. Mercy includes 32 acute care hospitals, four heart hospitals, two children's hospitals, three rehab hospitals and one orthopedic hospital, nearly 700 clinic and outpatient facilities, 40,000 co-workers and more than 2,100 Mercy Clinic physicians in Arkansas, Kansas, Missouri and Oklahoma. Mercy also has outreach ministries in Louisiana, Mississippi and Texas.

Data Management

- Patient data
- Reporting
- Metric tracking and dashboards
- Clinician/provider information
- Location data
- Wiki support



We work in the IT department – Mercy Technology Services, or MTS, about 900 strong
Data Management Team - responsible for the stewardship of Mercy's data assets. Everything from

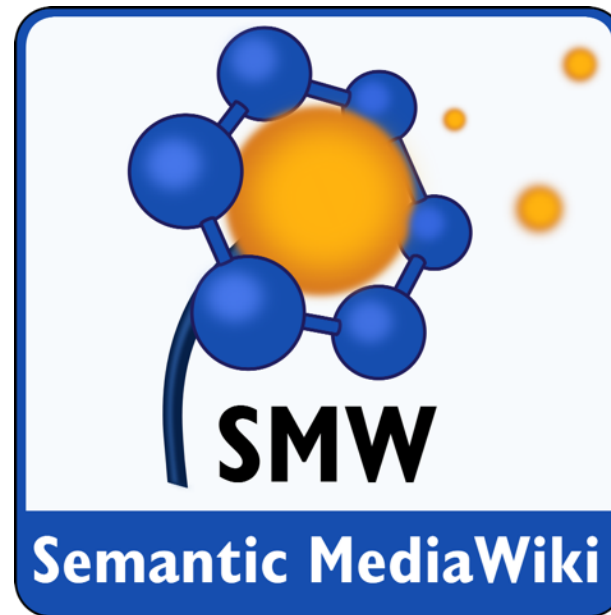
- patient data Go Green report or Chart Search
- Reporting
- metric tracking and dashboards
- clinician information
- location data, etc.

•To us...

mainly wiki support (only in the last year or so!) – helping new teams get started, answering questions, providing guidelines and standards, maintaining consistent help documentation on both of our wikis, etc.

Over to CHRIS – to tell you how we came to use a wiki...

How Wiki?



While we're a non-profit there somewhat of a corporate culture.

Structured, siloed

Regional vs. HQ sort of vibe sometimes - us vs them - a lot has changed in the past few years

So how the heck did a wiki get started and survive in such a seemingly structured organization?

It started small, proved useful, and grew

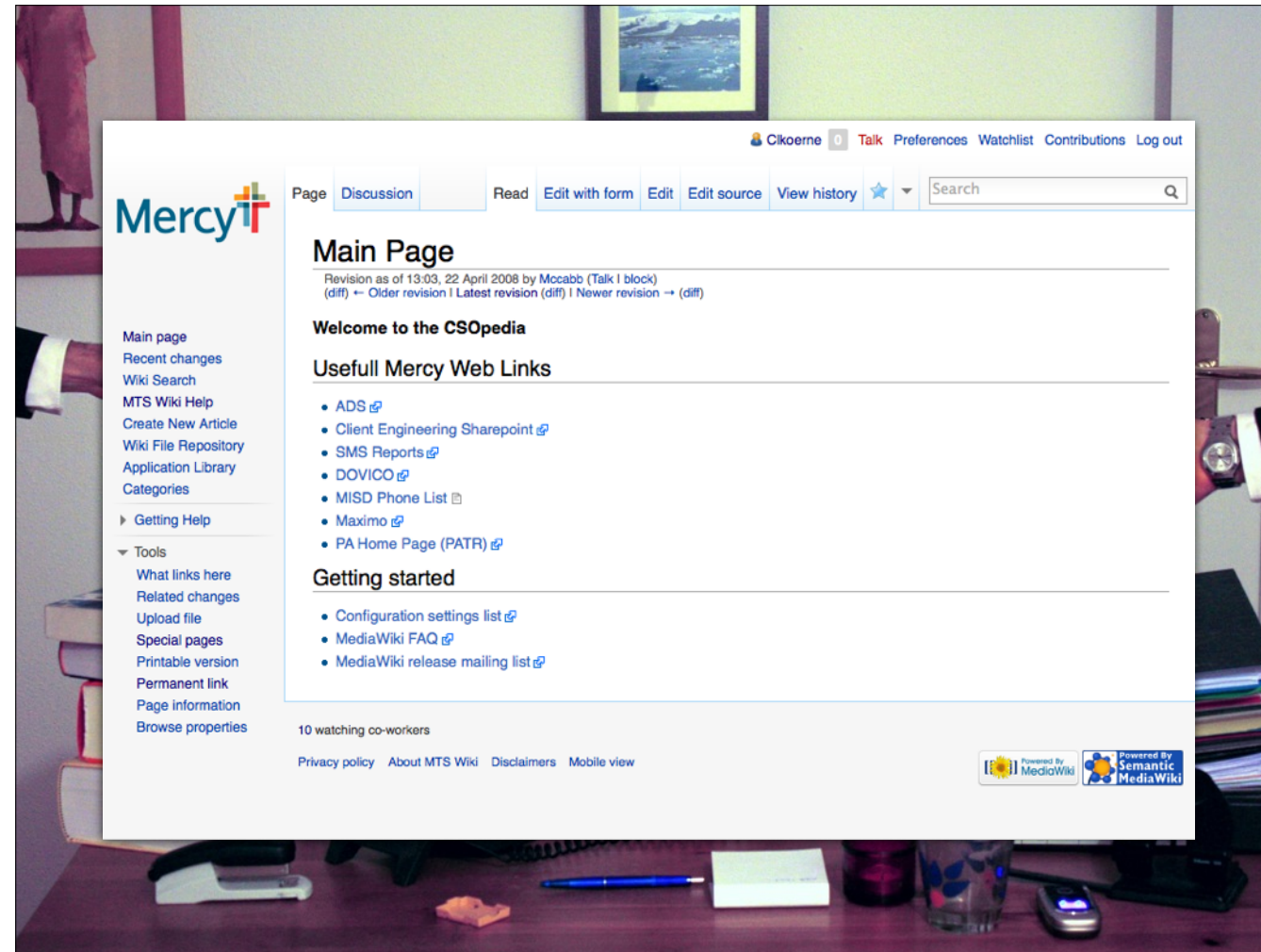


Mercy+

No prior skills and knowledge

started didn't know a thing, my background is in Communication Research and Theory. I have worked in IT for some time however and I found learning the intricacies of SMW to be interesting and necessary for my job. I'm also the kind of person who over researches things

In fact, when we first started out... Mail merge story - Access database, excel, exported a single page to see how the XML was structured, Then used Microsoft Word Mail merge



Started with our IT service center - people getting a ton of phone calls about our systems
hated answering the same questions over and over again. Started documenting common issues and resolutions

CSOpedia (MTS Wiki) (Customer Service Organization?)
service desk applications for tracking common issues and resolutions



Then we started keeping track of the applications we support

We tied it to an application and server tracking app called AIR/SIR (**DEMO AIR**)

When a new entry in AIR created – wiki page is created for documentation, architecture diagrams, support structure, common FAQs, etc.

Kept growing - infrastructure configuration, application configuration, server configuration. Processes, procedures, IT Job descriptions

35,961,366 views since 2008, 460,000 in the last year, 9,000 page views a month - for an internal wiki with a max of 900 possible visitor, not too bad

Then Data folks got interested



We created a new wiki, called the Information Portfolio in Late 2010

Same sort of need - sharing Common queries, sql statements, data locations in (database), available tools, etc.

Then Business folks

HR, Quality & Safety, Staffing Operations..

Continuing the work around data to become a repository for knowledge as work progressed on new intranet solution (b/c wiki was faster/easier/available!)

108,053 pageviews in the past year, 2,000 per month. (OVER TO NANCY to talk about some of our big contributors)

MTS Wiki

The screenshot shows the MTS Wiki homepage. At the top, there's a navigation bar with links like 'Page', 'Discussion', 'Read', 'Edit with form', 'Edit source', 'View history', and a search box. Below this is a header for 'Mercy Technology Services Wiki' with a list of links including 'MTS Wiki', 'Information Portfolio', 'Application & Server Inventory (AIR)', 'Mercy Service Manager', 'MTS Strategic Plan', 'MTS Standards', 'MTS Policies & Procedures', 'MTS Buzz Blog', 'MTS Newsletter', 'MTS Inside Matters', 'MTS Career Development Toolkit', 'MTS Co-Worker Toolbox', 'MTS Leader Toolkit', and 'Wiki Help'.

The main content area features a large blue banner for 'MTS Strategic Plan: The Road to World-Class'. Below this is a video player titled 'Mercy Executives Visit MTS: January 2014'. To the right of the video are sections for 'Recent News' (listing Q&A with CIO Gil Hoffman, Wiki Q&A Communities of Knowledge, Strategic Plan updates, and MTS Strategic Plan Release) and 'Most Popular Pages' (listing TISCO BW Engine Errors, MModel - Transcription Suite, Epic - ClinDoc, EPIC - Clarity, MTS Wiki Editing, Mercy - Mercy Insight, Epic - Orders, MTS Service Center Home, Remote, and Microsoft Outlook).

Below the video and popular pages are sections for 'Most Recent Technology Briefs' (listing Master Data Management Solutions, Customer Relationship Management, Data Loss Prevention, Health System Merger and Acquisitions, and IT Key Metrics) and 'Wiki Help' (listing Introduction, MTS Wiki Philosophy, Getting Started, Best Practices, MTS Wiki Editing, Help, FAQ, and Contact). To the right of the Wiki Help section are 'Key Areas' (listing MTS Architecture, Architecture Standards, Policies, Procedures & Work Instructions, Service Center, Enterprise Project Office, Project Framework & Governance, and Epic) and 'Other MTS Resources' (listing Master Technology Plan, Solution Review Board (SRB), MTS Alerts Web Site, MTS Leader Information, MTS Co-Worker Toolbox, MTS Co-worker SharePoint, Service Line Points of Escalation, and Mercy Project Intake & Governance).

At the bottom, there's a footer with statistics: 'The MTS Wiki has had 35,575,505 visits since its launch. There are 4,005 articles with 6,774 images. The wiki has been edited 289,325 times. There are 987 regular users. Contact'.

Big Contributors

MTS Wiki – first Mercy wiki, started in 2008 - Contributors are mostly IT staff – technical audience

Main Page – stats at bottom – more than 35 million visits, 4,000 plus articles, nearly 7,000 images

Standards documentation – how things are done

Application info

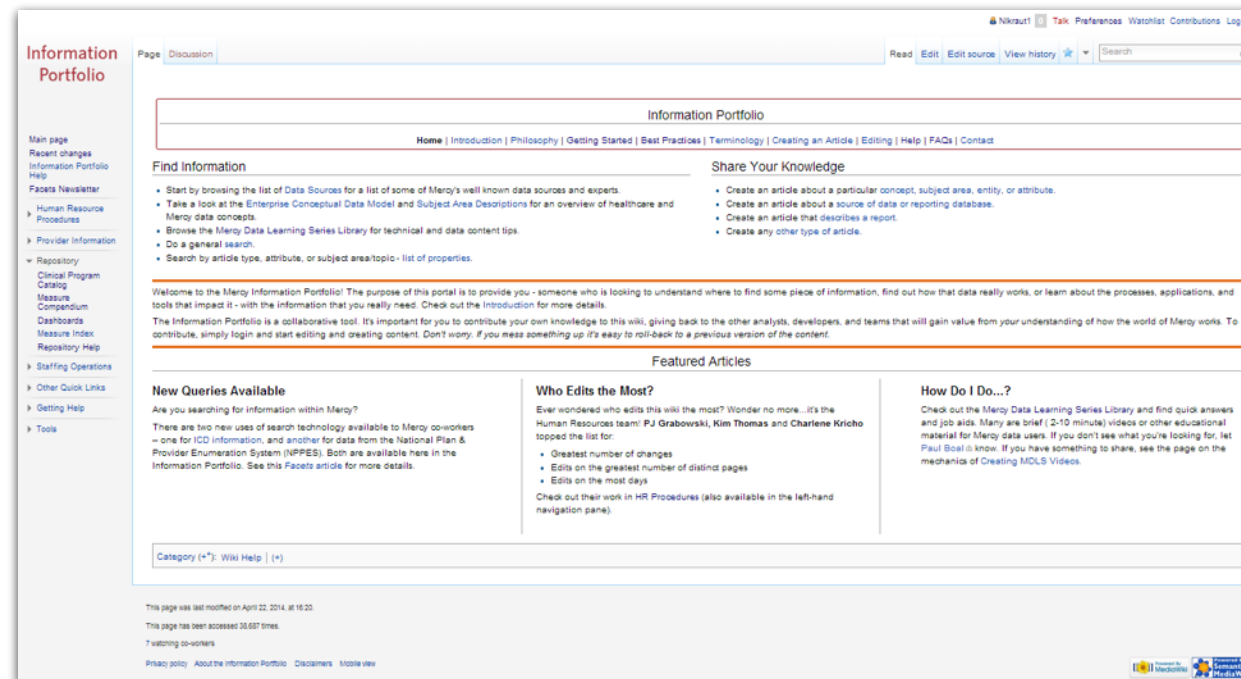
Some semantic links for applications

Next – sample pages...

Mercy 

Next – InfoPort...

Information Portfolio



Information Portfolio

Accessible by all 40,000 co-workers, but relatively few are using...yet! (Only 287 regular users)

About 8.5 million visits since launch in December 2010 – about 3.5 years of existence

Less technical than MTS Wiki more general information – building a knowledge base

Mercy's encyclopedia about our data assets

A collaborative knowledge base – developed by those who know

A place to learn and share

A metadata repository

Next – big “section” around measures...the Repository...

Business users include...

Measures to Results to Improvement



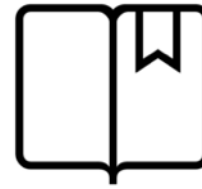
Measure Compendium

The *knowledge base* of Mercy clinical and business measures.



Dashboards

Descriptions of our dashboards and the measures they report.




Clinical Program Catalog

Details on clinical improvement initiatives across the Ministry, *shared* to avoid redundant efforts.



Measures to Results (dashboards/reports) to Improvements

...then Measure again!



Measure Compendium

Measure Compendium

Home | Introduction | Philosophy | Getting Started | Principles | Governance | Quality | Best Practices | Terminology | Dashboards | Help | FAQs | Contact

Why a compendium of measures?

[Expand]

Featured Measure Programs

Payment-Related


Assets


Financial Statistics


Mercy Service Lines


Pathways


Performance Excellence


**CMS**
Hospital Outpatient
Condition (27 measures)
Program verified:
Mar 1, 2014


**CMS**
Outpatient
Measure (2 measures)
Program verified:
Jul 1, 2013


**CMS**
Prior and Quality
Rating for Measure
Improvement (8 measures)
Program verified:
Jul 1, 2013


**CDC**
Hospital Outpatient
Condition (8 measures)
Program verified:
Jul 1, 2013


**CMS**
Hospital Outpatient
Condition (14 measures)
Program verified:
Oct 1, 2013


**CMS**
Hospital Outpatient
Condition (33 measures)
Program verified:
Aug 1, 2013


**CMS**
Hospital Outpatient
Condition (33 measures)
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Hospital Outpatient
Condition (33 measures)
Program verified:
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**CMS**
Hospital Outpatient
Condition (33 measures)
Program verified:
Aug 1, 2013

All Measure Programs

List of all Measure Programs

[Expand]

Measure Portfolios

A Measure Portfolio lists groups of measures that are similarly named and referenced, and used in more than one Measure Program. These lists help with disambiguation of measures with common names.

- Central Line Associated Bloodstream Infection
- Pressure Ulcer

Measure Contributors

Below are teams across the ministry that have contributed in some manner to the measures contained within the compendium.

Care Management, Emergency Medicine Specialty Council, Financial Planning and Analysis, Labor and Delivery Specialty Council, Managed Care Consulting, Marketing & Communications, Mercy Hospital St. Louis Severe Rehabilitation Team, Mercy St. Louis Team, Mission, Pathway Content Design Team, Quality and Safety Center

Contribute to the Compendium

There are a total of 823 measures in the Compendium. Measure Compendium State has more information on the health of the compendium.

Please use the links below to add a new Measure Program or individual Measure to the compendium.

Add a New Measure Program

Add a New Measure

File Storage

PDF, Word, Excel and other supporting documentation should be saved to the Clinical Library SharePoint. These files should be stored and organized on SharePoint, but accessed from a program or measure entry listed above. Within the SharePoint Measure Compendium folder are two additional folders titled Measure Programs and Measures. Create new folders as needed within these for your documentation.

For more information about using external files, refer to Linking to Files.

Categories (7): Measure Compendium Help | Measure Compendium (1) (6) (1) (1) (1)

Patient Safety Indicators


Measure Compendium > Patient Safety Indicators

Introduction to Patient Safety Indicators

The Patient Safety Indicators (PSIs) are a set of indicators providing information on potential in-hospital complications and adverse events following surgeries, procedures, and childbirth. The PSIs were developed after a comprehensive literature review, analysis of ICD-9-CM codes, review by a clinician panel, implementation of risk adjustment, and empirical analyses.

The PSIs can be used to help hospitals identify potential adverse events that might need further study; provide the opportunity to assess the incidence of adverse events and in-hospital complications using administrative data found in the typical discharge record; include indicators for complications occurring in-hospital that may represent patient safety events.

AHRQ PSI modules



Patient Safety Indicators Attributes

Program Type:

Payment Related

Measures in Program:

21

Measure Quality:

Well-Defined: 21, 6

Program Verification Date:

May 01, 2013

Related Clinical Program(s):

Patient Safety Indicator (PSI)-60
Performance Improvement

Appears in Mercy Dashboards:

Clinical Quality & Safety Measures Dashboard

Contributors:

Quality and Safety Center

Measure Compendium

Measure Compendium Home


Add a New Measure Program - Measure Compendium Help

More Information about Patient Safety Indicators

Patient safety has become an increasingly important measure of hospital quality. Patient safety measures are reflective of both clinical quality and effectiveness of systems within the hospital. The Agency for Healthcare Research and Quality (AHRQ) has developed a set of patient safety indicators that are widely used for measuring hospital safety. They use hospital administrative data, including surgical complications and other iatrogenic events, providing a useful tool to highlight potential concerns, identify areas that may need further study and investigation, and track changes over time.

List of all Related Measures

Measure ID	NQF ID	Status	Measure	Submit To	Financial Impact	Priority	Phase
PSI-60	0531	Active	PSI-60 Complication/patient safety for selected indicators (composite)	Centers for Medicare and Medicaid Services	-\$, +\$	Mandatory	VBP FY 2015
PSI-20		Retired	Obstetric Trauma - Cesarean Delivery		0		
PSI-19		Active	Obstetric Trauma - Vaginal Delivery Without Instrument	Centers for Medicare and Medicaid Services	0	Voluntary	
PSI-18		Active	Obstetric Trauma - Vaginal Delivery With Instrument	Centers for Medicare and Medicaid Services	0	Voluntary	
PSI-17	0474	Active	Birth Trauma-Injury to Neonate	Centers for Medicare and Medicaid Services	0	Voluntary	
PSI-16		Active	Transfusion Reaction	Centers for Medicare and Medicaid Services	0	Mandatory	
PSI-15	0345	Active	Accidental puncture or laceration	Centers for Medicare and Medicaid Services	-\$	Mandatory	VBP-FY15



Measure Compendium – multiple (91) Measure Programs, each with multiple Measures – more than 800 Contributors are across the Ministry - clinical, financial, administrative

although Mostly our Clinical Quality and Safety group,

Next – measures and dashboards



Mercy

Q&S:

What others tell us to measure?

Tomorrow: Single source of truth (foundational for all metrics)

Transparent to all

Apples to Apples comparison when using same measure

Educates

Ties to reports and dashboards

Also “connects” to clinical Program Catalog – PSI-03 attribute box

Next - Another “section” for improvements...clinical initiatives



Ties back to measures and measure programs...full circle!

Next – Aside from measures, also internal policies and procedures...

Mercy

HR - procedures for their team and also accessible to others; Confidential for their select few only

Next – another group that recently started using the wiki – Sustainability...



Category:Sustainability

This is the Sustainability category.

Pages in category "Sustainability"

The following 38 pages are in this category, out of 38 total.

C

- Catherine's Attic Oklahoma City
- Catherine's Attic Springfield

E

- Earth Day "Meet and Greet" Sign Up
- Energy Management
- Energy Savers Guide

G

- Green Administration
- Green Facilities
- Green Food Services / Nutrition
- Green News and Updates
- Green Office Program
- Green Your Home

I

- Ideas to Reuse or Repurpose Waste

M

- Mercy Sustainability Program

R

- Recycling at Mercy

S

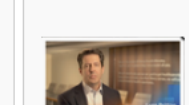
- Springfield Earth Day 2014 Volunteer Sign Up
- Sustainability Ada
- Sustainability Ardmore
- Sustainability Aurora
- Sustainability Berryville
- Sustainability Branson
- Sustainability Carthage
- Sustainability Cassville
- Sustainability Columbus
- Sustainability Fort Scott
- Sustainability Fort Smith
- Sustainability Independence

S cont.

- Sustainability Jefferson
- Sustainability Joplin
- Sustainability Lebanon
- Sustainability Mountain View
- Sustainability Oklahoma City
- Sustainability Rogers
- Sustainability Rolla
- Sustainability Springfield
- Sustainability St. Louis
- Talk:Sustainability St. Louis
- Sustainability Washington
- Sustainability with the Community

Media in category "Sustainability"

The following 22 files are in this category, out of 22 total.



Sustainability – growing fast!

Best Practice Sharing. The Wiki expands Mercy's ability to document and share sustainability best practices and knowledge. It will also provide opportunities for co-workers to share sustainability projects they are doing at home and within their community.

Next - Also using wiki for searches...

The Mercy Data Learning Series is a set of short educational videos or other material that provide data users at Mercy with tips and information that will help them with their jobs. The topics include everything from how to create pivot tables in Excel to linking Oracle tables into an MS Access database to an overview of the Epic Clarity database. If you have an idea for a topic, feel free to contact the Mercy Data Management Services team either via email to Paul.Boal@mercy.org or with an MTS Service Center service request (tell them to route it to the DATASVCS queue).

Title	Type	Key Words
Business Objects Explorer	Technical	Business Objects, Explorer, iSpace
Business Objects Input Controls	Technical	Report
Case Statement	Technical	SQL, Case Statement
Clarity SQL, HB Epic to Lawson Crosswalk	Data Content	HB, Hospital Billing, Crosswalk, Lawson, Epic, Cost Center, Accounting Unit
Clarity SQL, ICD9	Data Content	Clarity SQL, ICD, ICD9 Classification Diseases Category
Clarity SQL, MS DRG	Data Content	Clarity DRG Diagnosis Related Group
Clarity ZC Tables	Technical	Clarity Mapping ZCtable Joins
Data Governance and Location Data	Data Content	Governance, Location, TDWI
Distance for Destination Medicine		
Excel Comparison With Array Formulas	Technical	Excel
Excel Pivot Hierarchy	Technical	Excel Pivot table based Hierarchy
Excel Pivot Tables	Technical	Excel, Pivot Tables
FMS Dynamic Link	Technical	Dynamic Link, FMS
ICD-10 Coding Impact Overview	Data Content	ICD-10
Information Portfolio - New Data Topic	Technical	Information Portfolio
Information Portfolio Introduction	Technical	Information Portfolio introduction
Inight Report Re-scheduling	Technical	Inight Report Rescheduling
Integrated Provider Change Request	Data Content	Integrated Provider, Change request, MOLS

This article is an entry in the *Mercy Data Learning Series*, a resource for data users across Mercy. To see a complete list of videos see the [Mercy Data Learning Series Library](#). If you'd like to receive notification when a new video is posted, please subscribe to our group on [Slack](#).

ICD-10 Coding Impacts ([edit source](#))

The ICD-10 conversion effort has a major impact on how coding and billing is completed, and a resulting downstream impact on how reporting and analysis is done on that information. ICD codes are widely used across different types of reporting from quality to revenue to case management to research. It's important for reporting teams to understand the nature of the ICD-10 conversion and what downstream impact that will have on their reporting efforts.

The slides and presentation here were generated by Lisa Krasinski from the centralized coding team on July 31, 2018. The entire presentation is approximately 70 minutes, but includes introductions from all of the presenters as well.

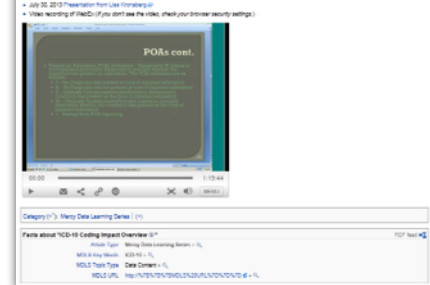


Figure 1 is a line chart titled "Daily ETC Completion Rate (2016/01/01 - 2016/01/31)". The y-axis is labeled "ETC Completion Rate" and ranges from 0.0 to 2.0. The x-axis shows dates from 1/1 to 1/31. The chart displays a blue line representing the daily completion rate. There is a prominent peak around January 10th, reaching a value of approximately 1.8. Following this peak, the rate drops sharply and then fluctuates between approximately 0.8 and 1.2 for the remainder of the month.

A list of all pages that have property "Facets Article Topic Areas" with value "Emerging Technology"

- ASUG SAP BusinessObjects User Conference 2013 Recap + ①
- Hadoop Communities of Knowledge + ②
- Navigating a River of Big Data with Elasticsearch + ②
- Starting to Monitor MyDashboard Usage + ①
- Take That Google! + ①





Upgraded, new contributors from departments far removed from where we started

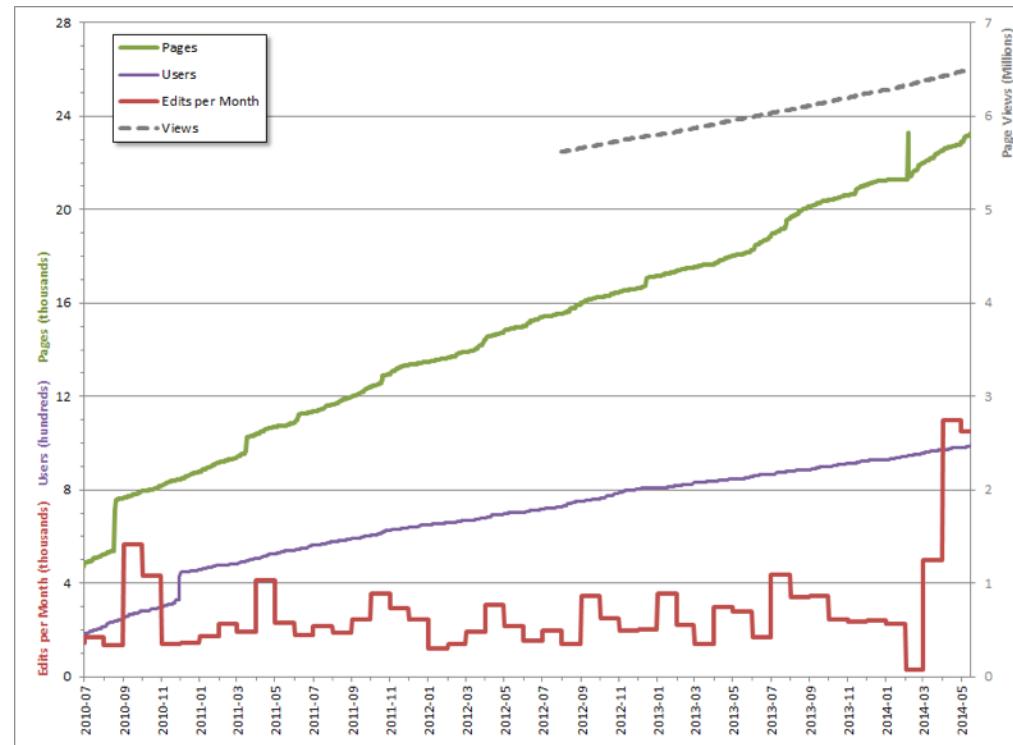
share some statistics on growth of users, pages, and traffic

Talk about how we've recently switched ticketing (customer service) solutions with plans to replace - wiki is still around!

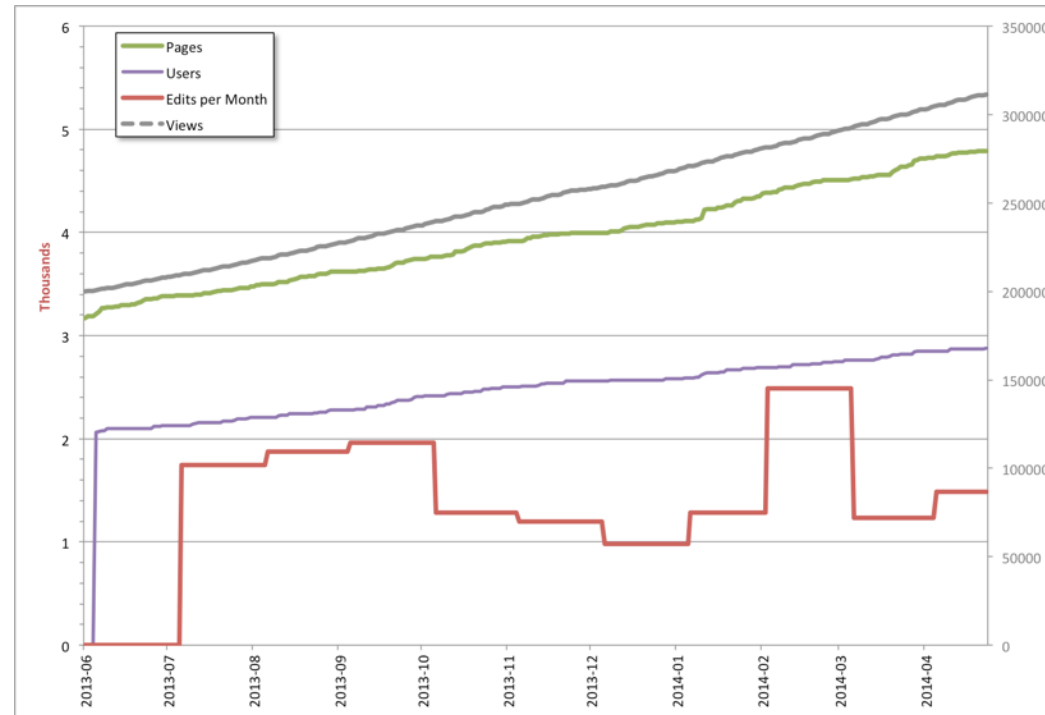
setup a new intranet and started migration

starting work to upgrade SharePoint to 2013

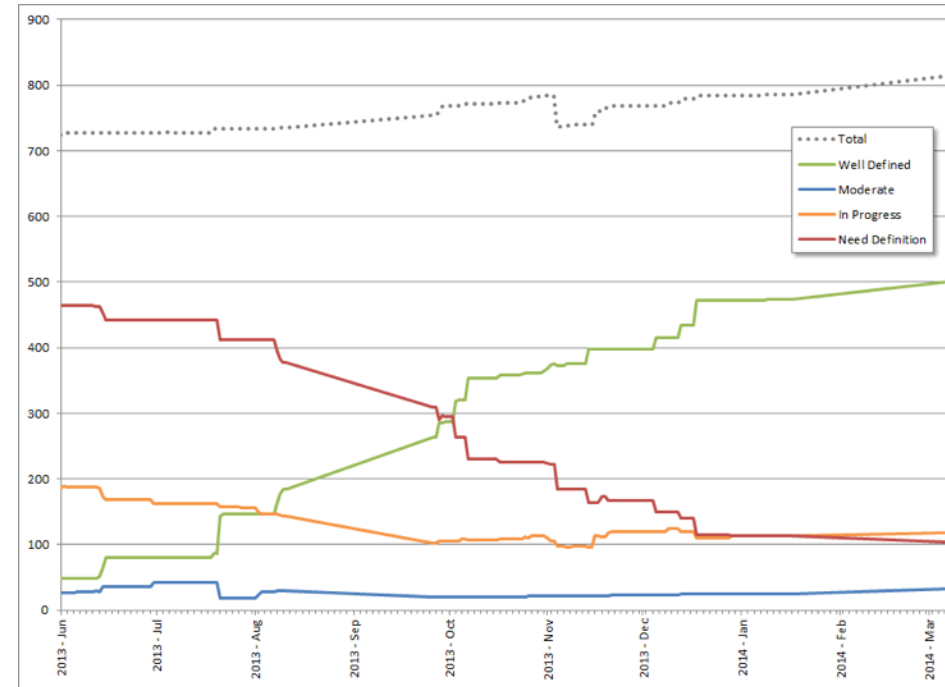
MTS Wiki



Information Portfolio



Measure Compendium



Information Portfolio

Main page

Recent changes

Information Portfolio Help

Facets Newsletter

Human Resource Procedures

Provider Information

Repository

Clinical Program Catalog

Measure Compendium

Dashboards

Measure Index

Repository Help

Staffing Operations

Other Quick Links

Getting Help

Tools

Special page

Contents [show]

ICD Crosswalk

[Return to the ICD Crosswalk](#)

Results

There are 26 results containing **Orca**. The first 1,000 results are returned below.

To better understand these results, [view the descriptions of the data](#).

Search for an ICD-9 code, an ICD-10 code or a key word. You can use * as a wild character (Example: "109" will search for all codes starting with "109").

Search for:

You can sort the results by clicking the header of any column below.

Data from IMO					Data from CMS ICD-9 to ICD-10 look-up		Data from CMS ICD-10 to ICD-9 look-up		
Diagnosis Code	Type	DX ID	DX Name	ICD 9 Code (list)	ICD 10 Code (list)	GEMs 9 to 10 Match?	GEMs 9 to 10 List	GEMs 10 to 9 Match?	GEMs 10 to 9 List
W56.21	Code	122775215	Bitten by orca		W56.21	No Match Found		No Match Found	
W56.2	Code	122800278	Contact with orca		W56.2	No Match Found		No Match Found	
W56.22	Code	122779047	Struck by orca		W56.22	No Match Found		No Match Found	
W56.21XA	Code	122767075	Bitten by orca, initial encounter		W56.21XA	No Match Found		No Match Found	E9063
W56.20	Code	122776217	Other contact with orca		W56.20	No Match		No Match	



The most interesting thing is the ways we have leveraged SMW purposefully and accidentally.

Cathrine's Attic

ICD Codes

MTS Wiki		Information Portfolio	
User statistics		User statistics	
Registered users	988	Registered users	288
Active users (list of members)		Active users (list of members)	23
(Users who have performed an action in the last 30 days)	118	(Users who have performed an action in the last 30 days)	
Bots (list of members)	3	Bots (list of members)	0
Administrators (list of members)	24	Administrators (list of members)	4
Bureaucrats (list of members)	13	Bureaucrats (list of members)	2
Moderators (list of members)	3	HR_Editors (list of members)	16
Policy_Editors (list of members)	4	Widget editors (list of members)	0
DBC_Editors (list of members)	7	Upload Wizard campaign editors (list of members)	0
CGC_Editors (list of members)	5	Semantic MediaWiki administrators (list of members)	0
Widget editors (list of members)	1		
Upload Wizard campaign editors (list of members)	1		
Semantic MediaWiki administrators (list of members)	1		
View statistics		View statistics	
Views total	36,075,224	Views total	8,496,565
(Views to non-existing pages and special pages are not included)		(Views to non-existing pages and special pages are not included)	
Views per edit	123.36	Views per edit	181.12
Most viewed pages		Most viewed pages	
Category:Application Form	7,956,976	Category:Data Article	3,092,058
Main Page	7,244,726	Property:Subject Area	348,848
TIBCO BW Engine Errors	98,223	Property:Article Type	331,360
Category:AIR InfoBox	77,738	Property:Is A	86,701
MModal - Transcription Suite	55,809	Property:Database Reference	75,738
Category:Green AIR Data Quality	54,174	Category:Measure Compendium	60,128
Epic - ClinDoc	50,219	Property:Measure Impact	47,348
EPIC - Clarity	43,750	Property:Cost	40,368
Category:CSOE	42,771	Property:Time	39,998
MTS Wiki Editing	40,627	Property:Medium	39,403
Semantic statistics		Semantic statistics	
Property values (total)	28,892	Property values (total)	19,358
Properties (total)	44	Properties (total)	182
Properties (registered with a page)	142	Properties (registered with a page)	313
Properties (assigned to a datatype)	137	Properties (assigned to a datatype)	291
Subobjects	0	Subobjects	0
		Queries	6,681
		Concepts	0
		Datatypes	14

This slide Influenced by Yolanda’s presentation and the conversation afterward

How do we have such growth? How do we sustain it?

Nurture - understand who are your subject matter experts

This is our product. We don’t ‘sell’ it, we are aware of other solutions in the enterprise, and we’re honest

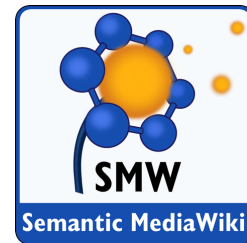
We do lots of things that don’t go anywhere, but sometimes they do - give people time - sometimes we’re faster or earlier

Monthly cleanup - pruning - special pages - tagging articles

people who edit are contributors - we avoid language like author or owner

plant lots of plants, strategically and nurture them to grow - some won't

Future



Epic

 **SharePoint**



Mercy

We're a multi-faceted shop, Drupal, SharePoint, and Wiki
different groups, history, and attention being paid to each

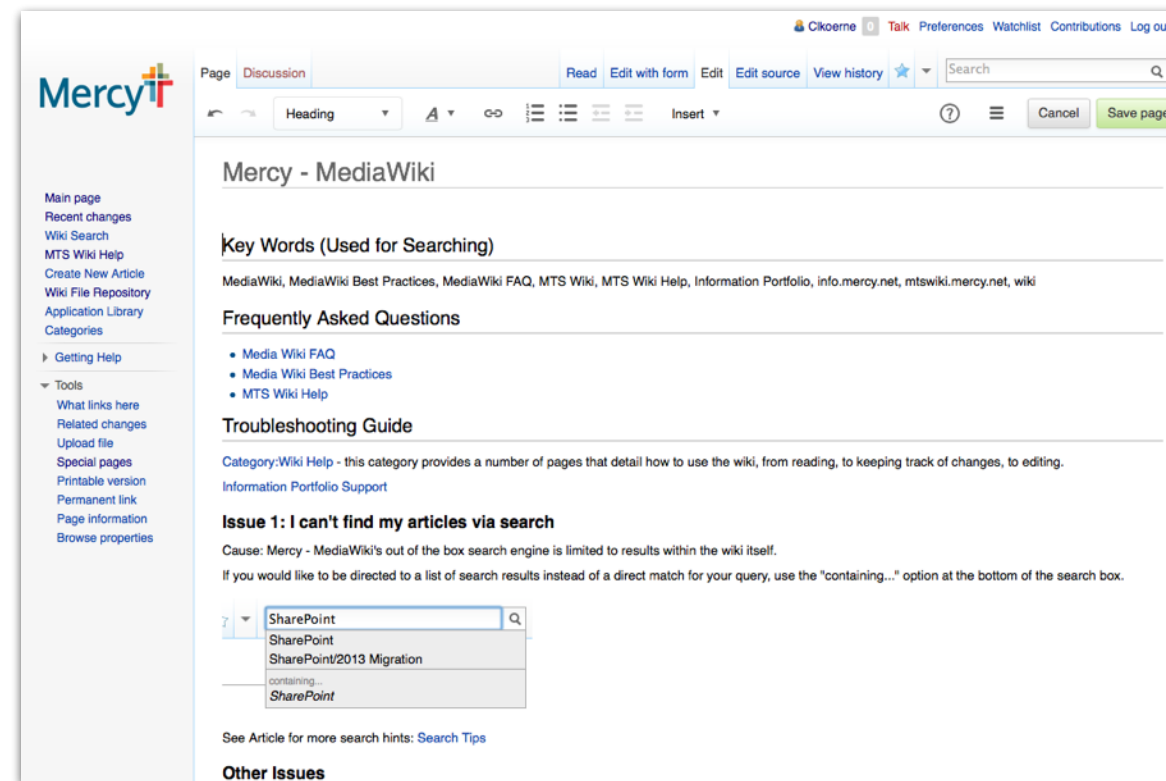
It will be interesting to see where we go and how the use of the wiki(s) will change

SharePoint 2013 is being worked on - we're working with that team to include wiki results in the search engine.

hadoop

We just upgraded, Nancy and I took over a year ago and this past Feb we went from version 1.16 of Mediawiki (1.5 of SMW) to 1.23 and 1.9

VisualEditor, MobileFrontend, External Data, Semantic Forms, Echo, UploadWizard



The biggest thing is visual editor
 we were using an old FCKEditor based WYSIWYG, people loved it, but it was terrible. Clunky, unpredictable, ancient
 It's 2014, people expect an easy-to-use editor

Wishlist

VisualEditor

Tables in VisualEditor

IE Support

VisualEditor in Semantic Forms

right now contributors have a mixed experience - various browsers and versions of Windows

wikitext sucks - is challenging/not intuitive for new (and even more experienced) users (I'm sure I'm not going to be popular for saying that)

Thank You

Questions?



References

- http://semantic-mediawiki.org/wiki/File:SMW_logo_3524px.png
- <https://www.flickr.com/photos/gsfcr/6673661419>
- <https://www.flickr.com/photos/jdhancock/8031897271/>
- <https://www.flickr.com/photos/ajmexico/3281139507>
- <https://www.flickr.com/photos/kugelfisch/6711401057>
- <https://www.flickr.com/photos/adselwood/2463634924>
- http://commons.wikimedia.org/wiki/File:Barn_raising_in_Lansing.jpg